



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/505,401	08/19/2004	Rami Siev	5472-3PUS	7251
27799	7590	02/15/2006	EXAMINER	
COHEN, PONTANI, LIEBERMAN & PAVANE 551 FIFTH AVENUE SUITE 1210 NEW YORK, NY 10176			TALBOT, MICHAEL	
			ART UNIT	PAPER NUMBER
			3722	

DATE MAILED: 02/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/505,401

Applicant(s)

SIEV ET AL.

Examiner

Michael W. Talbot

Art Unit

3722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 15-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 15-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/19/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: (1) 215 shown in Figure 8. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

Specification

2. The disclosure is objected to because of the following informalities:

Refer to page 3, line 32, the character reference "male cone 43" should be changed to read --male flange 43--.

Art Unit: 3722

Refer to page 14, line 31, the character reference "front face 314" should be changed to read --front face--.

Refer to page 15, line 5, the word "of" should be changed to --or-- so that the phrase "supplied from the processing machine itself of from an external source" will read --supplied from the processing machine itself or from an external source--.

Refer to page 15, line 37, the character reference "oil collet 331" should be changed to read --oil collet 351--.

Appropriate correction is required.

Claim Objections

3. Claim 1 is objected to because of the following informalities:

Refer to claim 1, page 2, line 14, the acronym used for internal surface chucking mechanism of "IMS" should be changed to read --ISM--.

Refer to claim 1, page 3, line 11, the colon ":" has been changed to a comma -- , -- in the phrase "mechanism: comprising" so as to read --mechanism, comprising--.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-7 and 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunham '885 in view of Drissner '256. Dunham '885 shows in Figures 1-5 an internal surface chucking mechanism (ISM) having a coupling mechanism (37;39,44,12) activable for gripping an internal surface of a work piece (13) on a processing machine. Dunham '885 shows the

Art Unit: 3722

process machine comprising an inner chamber (Fig. 1) having an axis and a volume, a push rod (42) operatively associated with the ISM to controllably command gripping and release of the internal surface of the work piece. Dunham '885 shows the ISM further having a bushing (11) configured to be retrievably received in axial alignment inside the chamber (Fig. 1) and configured internally to receive the coupling mechanism. Dunham '885 shows the coupling mechanism having a collet (12) with jaw pads on the collet fingers (31,32) normally in retraction position and extensible radially outward, a plunger (37,39) with a head (37') and a spring (44) for biasing the plunger away from the collet. Dunham '885 shows that forward translation of the push rod against the plunger to force the plunger head against the collet fingers for the jaw pads to grip an inner diameter of the work piece, while biasing the spring between the plunger and the collet. Dunham '885 shows that backward translation of the push rod away from the plunger causing the spring to actively bias the plunger backward, and the jaw pads to retract radially inward, whereby the gripped work piece is released (col. 1, lines 27-56). Dunham '885 shows the ISM of the process machine operating a process of material removal when non-rotative (Figs. 1-5) and rotative with a rotating spindle (Figs. 6,7 and col. 2, lines 43-65).

Dunham '885 lacks the presence of an external surface chucking mechanism (EXS) releasably and retrievably retained in axial alignment in the inner chamber and configured for gripping and releasing an external surface of the work piece. Drissner '256 shows in Figures 1 and 2 an EXS comprising a push tube rod (4), a spindle (1) and a chuck (6) for gripping and releasing an external surface of the work piece. In view of this teaching of Drissner '256, it would have been obvious to one of ordinary skill in the art to modify the processing machine of Dunham '885 to include an equivalent coupling mechanism comprising an external gripping

Art Unit: 3722

collet taught by Drissner '256 to enhance the versatility of the processing machine to adapt to varying work piece configurations, both of hollow and solid constructions.

6. Claims 1-7 and 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunham '885 in view of McConkey '876. Dunham '885 shows in Figures 1-5 an internal surface chucking mechanism (ISM) having a coupling mechanism (37,39,44,12) activable for gripping an internal surface of a work piece (13) on a processing machine. Dunham '885 shows the process machine comprising an inner chamber (Fig. 1) having an axis and a volume, a push rod (42) operatively associated with the ISM to controllably command gripping and release of the internal surface of the work piece. Dunham '885 shows the ISM further having a bushing (11) configured to be retrievably received in axial alignment inside the chamber (Fig. 1) and configured internally to receive the coupling mechanism. Dunham '885 shows the coupling mechanism having a collet (12) with jaw pads on the collect fingers (31,32) normally in retraction position and extensible radially outward, a plunger (37,39) with a head (37') and a spring (44) for biasing the plunger away from the collet. Dunham '885 shows that forward translation of the push rod against the plunger to force the plunger head against the collect fingers for the jaw pads to grip an inner diameter of the work piece, while biasing the spring between the plunger and the collet. Dunham '885 shows that backward translation of the push rod away from the plunger causing the spring to actively bias the plunger backward, and the jaw pads to retract radially inward, whereby the gripped work piece is released (col. 1, lines 27-56). Dunham '885 shows the ISM of the process machine operating a process of material removal when non-rotative (Figs. 1-5) and rotative with a rotating spindle (Figs. 6,7 and col. 2, lines 43-65).

Dunham '885 lacks the presence of an external surface chucking mechanism (EXS) releasably and retrievably retained in axial alignment in the inner chamber and configured for

Art Unit: 3722

gripping and releasing an external surface of the work piece. McConkey '876 shows in Figures 2-4 and 7 an EXS comprising a push tube (75), a spindle (20) and a chuck (22) for gripping and releasing an external surface of the work piece. In view of this teaching of McConkey '876, it would have been obvious to one of ordinary skill in the art to modify the processing machine of Dunham '885 to include an equivalent coupling mechanism comprising an external gripping collet taught by McConkey '876 to enhance the versatility of the processing machine to adapt to varying work piece configurations, both of hollow and solid constructions.

Conclusion

7. Any inquiry concerning the content of this communication from the examiner should be directed to Michael W. Talbot, whose telephone number is 571-272-4481. The examiner's office hours are typically 8:30am until 5:00pm, Monday through Friday. The examiner's supervisor, Mr. Boyer D. Ashley, may be reached at 571-272-4502.

In order to reduce pendency and avoid potential delays, group 3720 is encouraging FAXing of responses to Office Actions directly into the Group at FAX number 571-273-8300. This practice may be used for filling papers not requiring a fee. It may also be used for filing papers, which require a fee, by applicants who authorize charges to a USPTO deposit account. Please identify Examiner Michael W. Talbot of Art Unit 3722 at the top of your cover sheet.



MWT
Examiner
19 January 2006



BOYER D. ASHLEY
SUPERVISORY PATENT EXAMINER